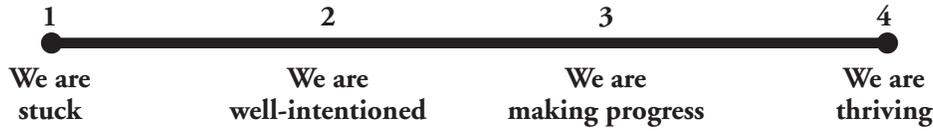


REPRODUCIBLE

Figure 1.1. School-Based Mathematics Program Needs Assessment Tool

The use of “I” (appearing first) speaks directly to the school-based leader and compels actions for personal reflection or structures that need to be established. The use of “we” describes the partnership between leaders, mathematics teachers, teams, and/or community members in a process of shared decision making. The use of “we” is reserved for instances when the school-based leader facilitates (or initiates/monitors) the actions of the mathematics teachers, team, or program improvement.



EA1: Define and develop a shared vision for high-quality mathematics teaching and learning.	We have a collaboratively developed, clearly articulated shared vision for exemplary mathematics teaching and learning.	1	2	3	4
	Our vision promotes equity and access to meaningful mathematics for all students.	1	2	3	4
	We have established a culture of learning mathematics for all.	1	2	3	4
	We have created action steps to work toward meeting the shared vision of mathematics teaching and learning.	1	2	3	4
	Our collective actions move toward closing the gap between current reality and our shared vision.	1	2	3	4
	When hiring new mathematics staff, processes are in place to evaluate new staff members' willingness to support meeting the mathematics teaching and learning vision.	1	2	3	4
	I work with and develop families as advocates for equitable mathematics learning.	1	2	3	4
EA2: Continually monitor the implementation of the vision and provide feedback to teachers in meeting the vision.	We collectively monitor progress in attaining the mathematics teaching and learning vision, and feedback is provided to teachers and staff in meeting the shared vision.	1	2	3	4
	I reflect on my personal growth and progress toward a collective vision for high-quality mathematics instruction.	1	2	3	4
	I foster a culture of two-way open and honest communication and maintain transparency with decisions, purpose, and direction to ensure alignment to the vision, actions steps, and plan.	1	2	3	4
	We consistently build/sustain strong working relationships to monitor and support attaining the shared vision.	1	2	3	4
	I am continuously present in mathematics classrooms and in professional learning with my teachers.	1	2	3	4
	I provide meaningful, action-oriented feedback on the progress of attaining the vision and clearly communicate it to all mathematics teachers and teams.	1	2	3	4
	We continually work together to activate the vision and support each other through peer accountability and attention to mathematics goals and strategies in the school improvement plan.	1	2	3	4
	We work with students, families, and community to share the mathematics teaching and learning vision and create bidirectional feedback opportunities with students, families, staff, and the community about the mathematics program.	1	2	3	4

(continued on next page)

REPRODUCIBLE

Essential Action	Statement	Scale
EA3: Require consistent high expectations for all students and teachers.	We believe that all students are capable of learning meaningful and relevant mathematics.	1 2 3 4
	As a team, we do not lower expectations for learning mathematics, and the teachers and teams continuously work toward making mathematics accessible for all students.	1 2 3 4
	We do not use deficit-oriented labeling or perceived readiness to influence placement or access to meaningful mathematics.	1 2 3 4
	I constantly work toward overcoming negative perceptions that are barriers to equitable mathematics teaching and learning.	1 2 3 4
	I consistently observe the use of formative processes to guide differentiation in each mathematics lesson as evident in flexible grouping, lesson design, questioning, and/or the types of mathematical tasks being implemented.	1 2 3 4
	To ensure equitable learning expectations, I ensure that mathematics teachers and teams have clearly identified essential standards for each grade level, course, unit, and lesson, and describe both what students should understand and be able to do.	1 2 3 4
	In collaboration with the mathematics teachers, I ensure that the essential standards support horizontal and vertical learning progressions.	1 2 3 4
EA4: Provide opportunities and resources to develop knowledge of relevant meaningful mathematics.	I understand what to look for and listen to in mathematics lessons that exemplifies how students are learning relevant and meaningful mathematics.	1 2 3 4
	We will ensure that mathematical tasks promote reasoning and problem solving and vary to address multiple levels of cognitive demand.	1 2 3 4
	We provide opportunities for all students to access meaningful, mathematical tasks to promote mathematical understanding.	1 2 3 4
	I consistently observe students engage in high levels of discourse every day to develop meaningful understanding of mathematics.	1 2 3 4
	I observe mathematics teachers consistently employ research-informed instructional strategies.	1 2 3 4
	I observe students use and connect a variety of mathematical representations.	1 2 3 4
	Curriculum guides, pacing, or scope and sequence documents provide guidance to teachers to ensure student understanding upon a research-based trajectory promoting professional guidance for decision making.	1 2 3 4
	Instructional materials and resources are free of bias and promote culturally relevant instructional opportunities.	1 2 3 4
EA5: Develop structures for continual job-embedded professional learning.	Time is built into the master schedule for teacher-to-teacher collaboration (vertically and/or horizontally) teams.	1 2 3 4
	Time is set aside for teachers to engage in job-embedded learning (lesson studies, instructional rounds, etc.).	1 2 3 4
	New learning is shared and valued by the school community with discussion around what this looks like for our students.	1 2 3 4

(continued on next page)

REPRODUCIBLE

Essential Action	Statement	Scale
EA5: <i>continued from previous page</i>	We provide feedback on implementing the new understandings and on practices to enrich mathematics instruction.	1 2 3 4
	I participate in learning with mathematics teachers to understand how to provide supportive conditions for the new teacher learning.	1 2 3 4
	Every professional learning opportunity includes collaboration to build collective teacher capacity and efficacy.	1 2 3 4
	We evaluate professional learning by examining teachers' reactions, the degree of their learning, their use of the professional learning content, the degree of change resulting from the professional learning, and the effect of the professional learning on students' mathematical understanding.	1 2 3 4
	I create opportunities to build new mathematics leaders.	1 2 3 4
EA6: Develop structures and systems to support intensification and extensions to meet the learning needs of all students.	Schedules are designed to support student learning and access to high levels of mathematics instruction.	1 2 3 4
	We work to identify barriers and challenges that might affect teacher and/or student engagement with meaningful mathematics learning to create plans to overcome barriers.	1 2 3 4
	Teachers are asked to complete projects and tasks that promote deep levels of instruction. Care is taken to eliminate processes and practices that get in the way or take up time that could be used in this manner.	1 2 3 4
	Structures and systems are in place to support student learning and promote intensification instead of remediation practices.	1 2 3 4
	I work collaboratively with the mathematics teachers to create intensification structures to support deep mathematical understanding.	1 2 3 4
EA7: Create structures to collectively collect, analyze, and celebrate evidence of student learning.	We have a shared vision of high-quality assessment processes that include formative assessment processes that result in teacher and student action through evidence gathering and feedback.	1 2 3 4
	I ensure that the mathematics teachers and teams use data-driven processes.	1 2 3 4
	I monitor the assessment tools that are used to gather evidence of student learning. I ensure assessment tools vary in the type of questions and develop mathematical rigor, a balance of procedural fluency, conceptual understanding, and application.	1 2 3 4
	I encourage adapting instruction and/or curriculum based on student thinking through modeling, co-teaching, or planning structures.	1 2 3 4
	We collectively monitor student progress during intensification time to identify success of intervention/enrichment.	1 2 3 4
	I collect evidence of student engagement in the assessment cycle as part of continuous improvement. Feedback and action are a required element of the assessment cycle.	1 2 3 4
	I create opportunities to celebrate the growth and success of our students.	1 2 3 4

Visit <https://www.mathedleadership.org/resources/summary.html> to download a free reproducible version of this figure.